BIODIVERSITY ASSESSMENT UPDATE FOR GEORGIA

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INTRODUCTION

This Biodiversity Assessment Update is prepared for the U.S. Agency for International Development (USAID) Caucasus Mission in Georgia in response to the Foreign Assistance Act (FAA) Section 119 and Automotive Directives System (ADS) 201 requirements on Environmental Analysis for Biodiversity Conservation. The original report was prepared in 1999 by Chemonics International that addressed the Mission's current Strategy (1999-2003). This report provides the Biodiversity Assessment Update for the Mission's next Strategic Plan (2004-2008).

The Assessment Team consisted of Mohammad Latif (USAID Regional Environmental officer), Ramaz Gokhelashvili (National Biodiversity Expert), and Peter Argo (Director, USAID Office of Energy and Environment) updated the original Biodiversity Assessment. Alicia Grimes, USAID Economic Growth, Agriculture and Trade (EGAT) Bureau expert on biodiversity and Philip Jones, Europe and Eurasia (E&E) Bureau Environmental Officer provided the principal Investigator function throughout the course of work. The team members talked to various individuals and organizations, gathered relevant information, performed the required analysis, and prepared the Biodiversity Assessment Update in compliance with the FAA Section 119 requirements addressing:

- (1) The actions necessary in Georgia to conserve biological diversity [FAA Section 119 (d) (1)], and
- (2) The extent to which the actions proposed for support by USAID meet the needs thus identified [FAA Section 119 (d) (2)].

The draft report was submitted to USAID/W (EGAT and E&E Bureaus) for review. The report was revised to respond to their comments.

The following are attached and complete the report:

Section 119 (d) (1) - Actions Necessary in Georgia to Conserve Biodiversity;

Section 119 (d) (2) - The Extent to which the Actions Proposed by USAID meet the needs thus identified:

"Table on Threats to Biodiversity and the corresponding Action for Biodiversity Conservation" including a Summary of Actions recommended in the 1999 Report, and their response to related Threats to Biodiversity Conservation; Status of Actions taken to-date by the host country or donors, and Additional Actions necessary for the 2003 Update to conserve biological diversity in Georgia;

Appendix A- List of Persons Contacted;

Appendix B- Literature Reviewed;

Appendix C- Biodiversity in Georgia - National, Regional and Global Importance;

Appendix D- New National Laws and International Conventions since 1999; and

Appendix E- List of Abbreviations

FOREIGN ASSISTANCE ACT (FAA) SECTION 119 (D) (1)

ACTIONS NECESSARY IN GEORGIA TO CONSERVE BIODIVERSITY

Reproduced below is a summary of the 1999 Report Actions, and additional actions identified in the 2003 Update. The additional actions were developed following a review of actions recommended in the 1999 report, and their response to related threats to biodiversity conservation; status of actions taken to-date by the host country or donors, and identification of additional biological diversity conservation actions for the 2003 Update. This analysis information is presented in a table attached to the report.

1. Finalize the Biodiversity Strategy and Action Plan (BSAP).

1999 Report Actions

Funds allocated for BSAP completion have been exhausted. There is a need to support a participatory process of BSAP development and completion. An international facilitator should be hired to assure this process. World Bank funds may become available, but it is important that a wide variety of stakeholders be involved in the process to promote information sharing, consensus-building, and ownership.

2003 Update Actions

Georgia needs to move the process forward by reestablishing the program leadership and involving donors to provide technical assistance.

2. Identify status and develop management guidelines for fragile or vulnerable habitats, and incorporate into EIA legislation.

1999 Report Actions

Identification and distribution of fragile and vulnerable habitats, such as alpine meadows and wetlands, should be the first step in developing management guidelines for the conservation and sustainable use of such areas. This should then be incorporated into environmental guidelines and legislation concerning different types of planned investment projects potentially affecting these habitats. At the same time, this information is important in prioritizing sites for biodiversity conservation.

2003 Update Actions

Adopt and implement systematic approaches to prioritize conservation efforts at the national level in Georgia. Systematic approaches are still lacking and create barriers in identification of critical sites and in policy and legal framework developments. More specifically, identify and prioritize critical habitats at the national level, and implement measures such as policy reform to place critical habitats under protected status. Alternatively, provide guidelines to mitigate impact of any land use and construction near/on these areas. The particular needs also include development of biodiversity information database in a useable format for decision making and stakeholder discussion purposes. The database should be developed using state-of the-art technologies such as Geographic Information Systems (GIS); performance of priority setting analyses such as U.S. Geological Survey (USGS) Gap Analysis Program (GAP); development of management planning guidelines for critical sites and habitats; and utilization of analyses results in the national policy and strategy developments.

3. Develop pilot initiatives in community-based natural resource management and biodiversity conservation, e.g., for forestry, grazing, wetlands, tourism.

1999 Report Actions

Given the harshness of Georgia's current economic situation, it is necessary to develop incentives for local communities and other stakeholder groups to better manage their resources. Management plans that clearly detail the rights, responsibilities, and benefits to local groups should be developed for improved management. Opportunities exist to build on or revive more ecologically sound traditional practices. In the absence of such incentives, it is clear that natural resources will continue to be depleted in an unsustainable fashion. Community-based management of forests, grazing lands, and wetlands should be encouraged on a pilot basis and carefully monitored for sustainability. Opportunities for community involvement in protected area management, *e.g.*, through ecotourism development and biodiversity monitoring, should be explored. Such initiatives are proposed under the Protected Areas Development (PAD) and Forestry Development (FDP) projects, as well as the Global Environmental Facility (GEF) arid zone project, and should be supported. Lessons learned from such initiatives will be very important for the future of biodiversity conservation in Georgia and the Caucasus.

2003 Update Actions

Develop incentives and motivation in local communities for biodiversity conservation. This is necessary because additional efforts are required due to the complexity of this topic. The incentives may include, but not limited to alternative income generation, pilot projects linking sustainable harvest of wild products to green markets, taxes and subsidies. This conservation action covers the highest number of the threats, and consequently many programs and donors should address it. Possible activities may include creation of a site-based care-takers network. Under the ongoing community-based natural resources management programs, expand activities to include fisheries management, non-timber forest products including medicinal plants, eco-tourism development (bird watching), community-based information and visitor centers, and the promotion of communities active participation in decision-making process.

4. Develop and build on mechanisms to bring together government, donors, academic and NGO groups for awareness raising, information sharing, and coordination of activities.

1999 Report Actions

There is confusion regarding the most appropriate and effective roles for government agencies, at both national and local levels, academic institutions, and NGOs. For biodiversity conservation to be effective, the relative advantages and different roles of these groups, and how they interact with communities and the public at large, need to be understood, internalized, and developed. While there is a good basis for coordination and communication, this needs to be improved, and capacity-building efforts need to be appropriately targeted. Resources will always be scarce and it is important that they are used optimally. Donors can play an important role in this process.

2003 Update Actions

Implement more activities in the field of biodiversity information sharing, communication and coordination of efforts among different stakeholders. The specific actions include wider use of participatory techniques in prioritization and planning processes; utilization of new technologies for improving the access to information and its sharing aspects, *e.g.*, biodiversity web-page development

and newsletter; and development of awareness raising activities at local levels involving wide range of stakeholders

5. Support NGOs in awareness raising and local initiatives.

1999 Report Actions

Environmental NGOs in Georgia have demonstrated considerable success in promoting and supporting biodiversity conservation. The World Wildlife Fund (WWF) has an extensive environmental education program, and other NGOs are also active in awareness raising, education, advocacy, and lobbying. Efforts to develop organizational capacity need to continue, particularly for NGOs and Community-based Organizations (CBOs) based outside the capital. This should be paired with building technical and implementation capabilities. Awareness raising and environmental education are areas where NGOs can be especially effective. But there is also a need to work with local communities to develop field-based conservation initiatives (see Action No. 3 above). Training, skills transfer, small grants, and partnerships with regional and international NGOs can significantly increase the ability of Georgian NGOs to be effective local development partners. Participatory monitoring of capacity building efforts is another important focus.

2003 Update Actions

Support biodiversity conservation oriented NGOs and CBOs at local levels in capacity building initiatives for biodiversity conservation, focusing particularly on the ability to monitor impacts of development activities, and their subsequent mitigation. The capacity of local conservation groups is still very weak and in many areas even non-existent. The ongoing Important Bird Areas Program provides an excellent foundation to develop this action.

6. Promote regional collaboration, through information sharing, exchange visits, study tours, conferences, and transboundary initiatives.

1999 Report Actions

Broadly speaking, Georgia's progress in biodiversity conservation is much more advanced than that of the neighboring states of Azerbaijan and Armenia. Lessons and experiences shared between these three countries in biological resources have the potential to significantly improve capacity in the region, as well as promote broader cooperation. Azerbaijan and Armenia can benefit from the experience of Georgian organizations, particularly NGOs, in information sharing, community-based initiatives, and policy development. Georgia is the only one of the three countries with representation of international conservation NGOs (WWF) and with experience implementing a major donor-funded biodiversity project (i.e., World Bank Arid and Semi-arid Ecosystems Conservation). Several organizations have regional "Caucasus" programs based in Georgia.

2003 Update Actions

Evaluate impacts of regional activities (completed and ongoing) and redesign them as necessary to have greater positive impact for biodiversity conservation. This would require regular review of lessons learned from several regional initiatives. This action will contribute positively to the regional collaboration in the future, specifically in the area of mitigation of illegal natural resources use, conservation of trans-boundary habitats and ecosystems, migratory species monitoring and conservation, and information and experience exchange initiatives.

FOREIGN ASSISTANCE ACT (FAA) SECTION 119 (D) (2)

THE EXTENT TO WHICH THE ACTIONS PROPOSED BY USAID MEET THE NEEDS THUS IDENTIFIED

A review of the Mission's next Strategic Plan (SP) for the 2004-2008, was conducted to identify the proposed components in USAID/ SP that have an impact on biodiversity conservation in Georgia. This analysis helped the team to develop the extent to which the actions proposed by USAID meet the needs thus identified. Reproduced below is a summary of the 1999 Report Actions, and additional actions identified in the 2003 Update

1999 Report Actions

Although biodiversity was not addressed as a specific issue in the 1999-2003 Strategic Plan for Georgia, a number of proposed activities were related to biodiversity conservation, including local environmental initiatives, with support to communities, local governments, civic associations, and concerned individuals. Identified high-risk problems requiring more significant investments of USAID resources included protected area and forestry development, primarily in association with the World Bank-supported programs in these areas. The USAID Strategic Plan for Georgia noted that "modest environmental activities" will be integrated into existing strategic objectives, notably in the energy sector. In addition, there is a special initiative on targeted privatization and cross-cutting programs of training and small grants.

While the Mission's program was considered "neutral" in its impact on biodiversity conservation, the NGO strengthening program, first through Initiative for Social Action and Renewal (ISAR) and subsequently Horizonti, significantly increased the capacity of environmental NGOs involved directly or indirectly in biodiversity conservation. Environmental NGOs were initial beneficiaries of this program, and support has now been extended to a broader spectrum of NGOs.

While not strictly under the Mission's purview, two environmental activities relevant to biodiversity conservation have been, and are currently, supported by other U.S. government agencies. USAID provided financial support through an interagency agreement with the U.S. National Park Service (NPS) to support the Department of Protected Areas (DPA) in institutional development, protected area system development, ecotourism planning, and financial sustainability of protected areas. The NPS has been closely involved with the development of the World Bank/GEF Protected Areas project, and has helped foster increased understanding of different alternatives to protected area management and financing, based on training and exchange visits between the United States and Georgia. Additionally, USAID has supported, again through an interagency agreement with the U.S. Environmental Protection Agency, the development of the Regional Environmental Center, although the extent to which it will be involved in the future remains unclear.

2003 Update Actions

The action proposed by USAID activity component in the Intermediate Result (IR) 1.5.2.1. on Environmental and Social Impacts Mitigated for Strategic Objective (SO) 1.5 is providing support through the U.S. National Park Service (NPS) in strengthening protected areas management, notably institutional strengthening, training, and exchange visits. USAID will, however, continue to monitor progress to see the results being achieved.

This action provides an opportunity to leverage funds provided under the GEF/World Bank Protected Areas Development project. Support for environmental awareness and outreach is especially important with respect to biodiversity conservation needs. Based upon the results of ongoing activities through NPS, and with GEF, possible activities may include support to NGOs involved in environmental awareness raising, media support, awareness raising of the implications and opportunities regarding policy and legislative reform (such as the new forest code), integration of awareness raising into local community-based natural resource management, and biodiversity conservation initiatives. The NPS would assist mentoring and technical assistance to DPA staff at three protected areas of Tusheti, Logodekhi, and Vashlovani in protected area management, business planning and ranger training. Rangers will be trained in patrolling and enforcement, and working with local communities and user groups to build understanding and support for proper management of protected area.

USAID supported action through an interagency agreement with the U.S. Environmental Protection Agency helped the development of the Regional Environmental Center (REC) in supporting small grants program for natural resources management including biodiversity conservation aspects.

The REC will continue awarding small grants in dealing with certain components of biological diversity. USAID through regular interagency and donor meetings will monitor improvements in specific areas of biodiversity conservation. The Mission would follow progress with the REC because of its potential value for regional cooperation. For example, it could provide an opportunity to continue open Parliamentary meetings and public hearings developed under the Technical Assistance to the Commonwealth of Independent States (TACIS) awareness-raising program. Because both ISAR-Baku and the NGO Center in Yerevan were supported by USAID, there is a clear opportunity to integrate these activities into future USAID programming for NGO support. In the future, the Mission may consider an effort targeted at improved understanding of biodiversity and why it is important, and linking biodiversity to wider environmental and economic issues.

Though another interagency agreement, USAID action under SO 1.5 supported the U.S. Department of Energy (USDOE) in providing technical assistance including a workshop in May 2000 to Georgia in developing legislation for Contingency Planning for Oil Spill Response (OSR), and conducted a hands-on training workshop in January 2001 related to mitigation of impacts due to oil spills.

This action helped transfer the technologies and information associated with restoration of the ecosystem in the Black Sea within the boundaries of Georgia. USAID will continue to monitor progress and sustainability through interagency meetings and host country input under the proposed Support Programs (SO 4.2) and Special Initiatives (SO 4.1), as deemed necessary.

As a component of Water Resources Management in the Kura River Basin, USAID supported Eurasia Foundation (EF) plans to encourage citizen participation in solving legal, economic and social problems, in the sphere of environment protection and regional water resources management.

The small grants assistance program compliments the activities under the SOs that are innovative and pilot in nature. The EF has had a successful program since 1995. To this end, the action will support non-governmental organizations and community activist groups that propose solutions in their communities, nationally and regionally by introduction of pilot projects, transfer of best international practices, and/or changes to policy, environmental protection and water management. For the Public Environmental Awareness in Debed/Khrami Watershed, action would help to develop a comprehensive linkage proposal to protect trans-boundary water systems from pollution by raising awareness of water rights and environmental protection issues among the population and local government authorities in the Debet and Khrami river basins.

As a component of Strengthening of Water Resources Management in the South Caucasus, USAID supported DAI under SO 1.5, is implementing activities to promote regional cooperation through water resources database and information sharing, integrated river basin planning, exchange visits, conferences, partnerships, and transboundary projects (e.g., within the context of Kura-Araks basin initiative).

Environment is an area that presents significant opportunities for cooperation between Georgia and the neighboring states of Armenia, Azerbaijan, and Turkey; there are many shared resources as well as a history of cooperation between Georgia, Armenia, and Azerbaijan. DAI's ongoing regional Caucasus water initiative covering Georgia, Armenia and Azerbaijan is providing a framework for fostering an increase in cooperation for the management of water resources in the region, demonstration of integrated river basin planning in Alazani River Basin in Georgia and Azerbaijan, and Khrami-Debed River Basin in Georgia and Armenia, and an assessment of institutional, legal and policy issues for more effective water management in the region. Due to the integrative nature of planning, biodiversity sector is equally represented (protected areas in the basin, nature resources management aspects, and species and habitats conservation). Promoting an inter-sectoral approach in water recourses management is providing a foundation for increased cooperation between the agencies involved in natural resources management not just at the regional and national levels, but also at the local level. Other activities include environmental awareness and NGO development.

The Community Development component of the Georgia Energy Security Initiative (GESI) under the USAID/Caucasus Strategic Objective (SO) 1.5 will contribute to achieve a more economically efficient and environmentally sustainable energy sector, thus minimizing the use of illegal fuel wood and energy sources that result in deforestation and loss of biodiversity. Specifically, the Community Development component of this GESI program applies to Intermediate Results (IR) 1.5.1 – increased private sector participation, and IR 1.5.4 – increased efficiency in the energy sector.

An overall objective of this multi-year Community Development component is to help pave the way for a sustainable energy future and improved quality of life for the communities of Georgia. A parallel objective is to counteract the problem of unsustainable exploitation of forests by supporting the development of a replicable approach for assisting local entrepreneurs to initiate and implement rural projects that harness energy technologies for productive uses and income generation and environmentally sustainable uses.

The GESI is intended to support the Government of Georgia in implementing a national energy strategy that aims to achieve a greater level of energy independence and national energy security. GESI's Community Mobilization task endeavors to work with communities to develop energy alternatives and

natural resource management practices that, in turn, will relieve pressure on forests and help stimulate economic growth. The program being proposed here will consist of a balanced approach towards the four key objectives of community development and participation, socio-economic opportunity, energy alternatives, and mitigating deforestation.

On the side of community development and socioeconomic opportunity, the community development team will apply well-established participatory techniques – in both community selection and subsequent community mobilization phases – to ensure that interventions respond truly and comprehensively to communities' needs (including the differing priorities of diverse sub-groups within communities). These participatory methodologies have been used successfully around the world to avoid the pitfalls of technology-heavy approaches that have too often measured success in terms of installing energy systems more than meeting the needs of the communities they are intended to serve. In the design and implementation of participatory approaches, GESI will build on Winrock's extensive experience as well as the Georgian community mobilization experience of Horizonti, Mercy Corps International, CARE, the Urban Institute and others.

In order to meet the communities' development needs through the promotion of energy alternatives and reduced deforestation, Winrock will examine various supply-side options for power generation in communities that do not have reliable or affordable access to grid-based electricity. Options to be considered include, but are not limited to: mini-hydro, biogas digesters, solar water heating, photovoltaics, small-scale wind energy, and geothermal. GESI will foster selected communities' participation in various energy programs, including energy conservation and alternative energy technology systems, in all phases – from project identification to design, from implementation to long-term maintenance. In addition, this component will put into place assistance programs to encourage existing entrepreneurs or develop new commercial enterprises to either provide energy services on a sustainable (commercial) basis or consume energy in a responsible and productive manner.

"Table on Threats to Biodiversity and the corresponding Action for Biodiversity Conservation" including a Summary of Actions recommended in the 1999 Report, and their response to related Threats to Biodiversity Conservation; Status of Actions taken to-date by the host country or donors, and Additional Actions necessary for the 2003 Update to conserve biological diversity in Georgia. (C—

Action is completed, P – Action is in progress)

Action No.	Conservation Actions Recommended in 1999 Finalize the BSAP: • A need to support a participatory process of BSAP development and completion. • Importance of a wide variety of stakeholders involvement in the process to promote information sharing, consensus-building, and ownership.	Threat(s) Addressed by Conservation Actions (The threat numbers are listed on the last page of this table) 7. Weak Legal framework 8. Weak Institutional Capacity of government agencies 9. Weak Policy framework 10. Low level of environmental awareness and biodiversity valuation	Actions Taken by the host government or donor • Biodiversity Enabling Activity, WB/GEF, Ministry of Environment (P)	Additional Actions needed for the FAA 119 Country needs to move the process forward by reestablishing the program leadership and involving other donors to provide technical assistance.
2	 Identify status and develop management guidelines for fragile or vulnerable habitats, and incorporate into EIA legislation: Identification and distribution of fragile and vulnerable habitats, such as alpine meadows and wetlands; Incorporation into environmental guidelines and legislation concerning different types of planned investment projects potentially affecting these habitats. Use this information in prioritizing sites for biodiversity conservation. 	1. Habitat Loss and fragmentation 5. Lack of conservation activities outside of PAs 7. Weak Legal framework 9. Weak Policy framework 11. Unavailable systematic tools for prioritization - databases on species, habitats, etc.	 Priority Measures and Projects, KFW (C) Conservation output for the Caucasus, CI, CEPF, WWF (C) Important Bird Areas, BirdLife/GCCW (P) South Caucasus Highland and Mountain Development Project, SDC/SAB/IFAD Planning for Javakheti Wetlands Management, various donors 	Develop systematic approaches to prioritize conservation efforts at national level in Georgia. Such approaches are still lacking and create barriers in identification of critical sites and in policy and legal framework development. The particular needs include: 1. Development of Biodiversity Information Data-base; 2. Performance of priority setting analyses; 3. Development of management planning guidelines for critical sites and habitats; and 4. Utilization of analyses results in the national policy and strategy developments.
3	Develop pilot initiatives in community-based natural resource management and biodiversity conservation, e.g., for forestry,	1.Habitat Loss and fragmentation	 PAs Development Project, WB, GEF (P) Georgian Forests Development, WB 	Develop incentives and motivation in local communities for biodiversity conservation. This

	 grazing, wetlands, tourism: Develop incentives for local communities and other stakeholder groups to better manage their resources. Develop management plans that clearly detail the rights, responsibilities, and benefits to local groups. Build on or revive more environmentally sound traditional practices. Community-based management of forests, grazing lands, and wetlands should be encouraged on a pilot basis and carefully monitored for sustainability. Community involvement in protected area management, e.g., through ecotourism development and biodiversity monitoring, should be explored. Such initiatives are proposed under the Protected Areas Development (PAD) and Forestry Development (FDP) projects, as well as the GEF arid zone project, and 	2. Invasive species 3. Illegal Hunting and harvesting 4. Pollution of the Black Sea 5. Lack of conservation activities outside of PAs 10. Low level of environmental awareness and biodiversity valuation 12. Absence and/or weak capacity of CBOs and local community groups 14. Limited role of private sector in Biodiversity Conservation	 (P) Integrated Coastal Zone Management, WB, GEF, Government of the Netherlands (P) Borjomi-Kharagauli National Park, KFW/WWF (C) Borjomi-Kharagauli National Park Support zone development program, KFW (P) Strengthening Water Management in the South Caucasus, USAID, DAI (P) Important Bird Areas, BirdLife/GCCW (P) Agriculture Research, Extension and Training, WB, GEF (P) Irrigation and Drainage Community Development Project, WB (P) Civil Society Development Program, Eurasia Foundation, USAID (P) Public Administration Program, Eurasia Foundation, USAID (P) 	is necessary because additional efforts are required due to the complexity of this topic. This conservation action covers the highest number of the threats, and consequently many programs and donors should address it.
4	should be supported. Develop and build on mechanisms to bring together government, donors, academic and NGO groups for awareness raising, information sharing, and coordination of activities: Need to be understood, internalized, and developed the relative advantages and different roles of these groups, and how they interact with communities and the public at large Improvement of coordination and communication Capacity-building efforts need to be appropriately targeted.	8. Weak Institutional Capacity of government agencies 10. Low level of environmental awareness and biodiversity valuation 12. Absence and/or weak capacity of CBOs and local community groups	 Priority Measures and Projects, KFW (P) Eco-regional Planning for the Caucasus, WWF/McArthur Foundation (C) Conservation output for the Caucasus, CI, CEPF, WWF (P) Caucasus Environmental NGO Network, USAID and SDC (P) Strengthening Water Management in the South Caucasus, USAID, DAI (P) Civil Society Development Program, Eurasia Foundation, USAID (P) Public Administration Program, Eurasia Foundation, USAID (P) 	Implement more activities in the field of biodiversity information sharing, communication and coordination of efforts among different stakeholders. The specific actions include: 1. Wider use of participatory techniques in prioritization and planning processes; 2. Utilization of new technologies for improving the access to information and its sharing aspects, e.g, biodiversity web-page development and newsletter; and 3. Development of awareness raising activities at local levels involving wide range of stakeholders.

5	 Support NGOs in awareness raising and local initiatives: Efforts to develop organizational capacity need to continue, particularly for NGOs and CBOs based outside of the capital. This should be paired with building technical and implementation capabilities. Awareness raising and environmental education are areas where NGOs can be especially effective. But there is also a need to work with local communities to develop field-based conservation initiatives. Training, skills transfer, small grants, and partnerships with regional and international NGOs can significantly increase the ability of Georgian NGOs to be effective local development partners. Participatory monitoring of capacity building efforts is another important focus. 	5. Lack of conservation activities outside of PAs 10. Low level of environmental awareness and biodiversity valuation 12. Absence and/or weak capacity of CBOs and local community groups	 Important Bird Areas, BirdLife/GCCW (P) Regional Environmental Center, US EPA and EU (P) Civil Society Development Program, Eurasia Foundation, USAID (P) Public Administration Program, Eurasia Foundation, USAID (P) 	Support biodiversity conservation oriented NGOs and CBOs at local levels in capacity building initiatives for biodiversity conservation, focusing particularly on the ability to monitor impacts of development activities, and their subsequent mitigation. The capacity of local conservation groups is still very weak and in many areas even non-existent. The ongoing Important Bird Areas Program provides an excellent foundation to develop this action.
6	Promote regional collaboration, through information sharing, exchange visits, study tours, conferences, and transboundary initiatives: • Lessons and experiences shared between the three countries (Azerbaijan, Armenia, Georgia) that together represent many of the biological resources unique to the South Caucasus region have the potential to significantly improve capacity in the region, as well as promoting broader cooperation in a more general sense. • Azerbaijan and Armenia can benefit from the experience of Georgian organizations, particularly NGOs, in information sharing, community-based initiatives, and policy development.	13. Weak regional cooperation among countries in the Caucasus This action relates also to all other threats	 Arid and Semi-arid Ecosystems conservation, UNDP, GEF, NACRES (C) Priority Measures and Projects, KFW (P) Eco-regional Planning for the Caucasus, WWF/McArthur Foundation (C) Conservation output for the Caucasus, CI, CEPF, WWF (P) South Caucasus Highland and Mountain Development Project, SDC/SAB/IFAD (P) Caucasus Environmental NGO Network, USAID and SDC (P) Strengthening Water Management in the South Caucasus, USAID, DAI (P) Black Sea Environmental Program, EU, various donors (P) Regional Environmental Center, US EPA and EU (P) South Caucasus Cooperation 	Evaluate impacts of regional activities (completed and ongoing) and redesign as necessary to have maximum positive impact for biodiversity conservation. This would require regular review of lessons learned from several regional initiatives. This action will contribute positively to the regional collaboration in the future, specifically in the area of: Mitigation of illegal natural resources use, conservation of trans-boundary habitats and ecosystems, migratory species monitoring and conservation, and information and experience exchange initiatives.

	Program, Eurasia Foundation,	
	USAID	

List of Threats according to 1999 Report

- 1. Habitat Loss and fragmentation
- 2. Invasive species
- 3. Illegal Hunting and harvesting
- 4. Pollution of the Black Sea
- 5. Lack of conservation activities outside of PAs
- 6. Lack of conservation actions at Tbilisi Zoo
- 7. Weak Legal framework
- 8. Weak Institutional Capacity of government agencies

- 9. Weak Policy framework
- 10. Low level of environmental awareness and biodiversity valuation
- 11. Unavailable systematic tools for prioritization data-bases on species, habitats, etc.
- 12. Absence and/or weak capacity of CBOs and local community groups
- 13. Weak regional cooperation among countries in the Caucasus
- 14. Limited role of private sector in Biodiversity Conservation

List of Internationally Funded Programs and Projects in Georgia related to Biodiversity (1999-2003)

- 1. PAs Development Project, WB, GEF
- 2. Biodiversity Enabling Activity, WB/GEF
- 3. Georgian Forests Development, WB
- 4. Arid and semi-arid Ecosystems conservation, UNDP, GEF, NACRES
- 5. Conservation of Georgia's Agrobiodiversity, UNDP, GEF, ELKANA
- 6. Medicinal Plants Project, SDC, WWF
- 7. Integrated Coastal Zone Management, WB, GEF, Government of the Netherlands
- 8. Borjomi-Kharagauli National Park, KFW/WWF
- 9. Borjomi-Kharagauli National Park Support Zone Development Program, KFW (includes such activities as medicinal plants, natural resources sustainable use, water management, infrastructure development, etc.)
- 10. MoE Capacity Building, UNDP
- 11. Priority Measures and Projects, KFW
- 25. Civil Society Development Program, Eurasia Foundation, USAID
- 26. Public Administration Program, Eurasia Foundation, USAID
- 27. South Caucasus Cooperation Program, Eurasia Foundation, USAID
- 28. Planning for Javakheti Wetlands Management, various donors
- Remark Reportedly, Georgia's Government contributes to the majority of programs (particularly funded by the WB, GEF and EU). There is no action taken by Georgia's government alone.

- 12. Eco-regional Planning for the Caucasus, WWF/McArthur Foundation
- 13. Conservation output for the Caucasus, CI, CEPF, WWF
- South Caucasus Highland and Mountain Development Project, SDC/SAB/IFAD
- 15. Caucasus Environmental NGO Network, USAID and SDC
- 16. Energy related programs, USAID, PA
- 17. Removing Barriers to Energy efficiency, UNDP, NACC
- 18. Irrigation and Drainage Community Development Project, WB
- 19. Agriculture Research, Extension and Training, WB, GEF
- Strengthening Water Management in the South Caucasus, USAID, DAI
- 21. Black Sea Environmental Program, EU, various donors
- 22. Important Bird Areas, BirdLife/GCCW
- 23. WWF legal initiatives
- 24. Regional Environmental Center, US EPA and EU

APPENDIX A

List of Persons Contacted

Name	Institution
Besarion Lobjanidze	State Department of Protected Areas
Darejan Kapanadze	The World Bank Resident Mission
Goga Sanadiradze	WWF Caucasus Program
Ia Tsagareishvili	Swiss Agency for Development and Cooperation
Irine Samadashvili	BP Exploration, Tbilisi office
Keti Chachibaia	UN Development Program
Keti Khutsishvili	Eurasia Foundation
Lexo Gavashelishvili	Georgian Center for the Conservation of Wildlife
Maia Mgaloblishvili	KFW Tbilisi office
Maka Bitsadze	Department of Biodiversity, Ministry of Environment of Georgia
Malkhaz Dzneladze	WWF Caucasus program
Mamuka Gvilava	Integrated Coastal Zone Management Center
Nana Janashia	Caucasus Environmental NGO Network
Nato Kirvalidze	Caucasus Regional Environmental Center
Paata Shanshiashvili	Georgia Protected Areas Development Center
Peter Argo	Office of Energy and Environment, USAID

APPENDIX B

Literature Consulted

AHT International, TAESCO, CUNA Georgica, WWF and KfW 2003. <u>Elaboration of a Vision of an Ecoregional, Conservation Plan and Proposal of a Nature and Biodiversity Conservation Program in the Caucasus Region: Priority Measures and Projects. Tbilisi, Georgia</u>

GCCW 2003. Annual Report 2002

Government of Georgia 2002. <u>Economic Development and Poverty Reduction Strategy of Georgia</u>

MoE 2003. Directory of Projects co-financed from GEF, Global Environmental Facility

MoE 2000. National Environmental Action Plan

NACRES 2002. Georgia's Arid and Semi-arid Ecosystems Conservation Plan

UNEP/GRID 2002. Caucasus Environment Outlook (CEO) 2002

USAID/Chemonics International 2000. Biodiversity Assessment for Georgia

WWF 2001. <u>Biodiversity of the Caucasus Ecoregion: an analysis of biodiversity, current threats</u>, and initial investment portfolio

APPENDIX C

Biodiversity in Georgia - National, Regional and Global Importance

Georgia, a mountainous country covering 70,000 km² with a population of some 4.5 million people, is situated between the south slope of the Caucasus Mountains, the east coast of the Black Sea, and the northern edge of the Turkish Anatolia plain. Forests cover 40 percent of the country (2.8 million ha). The varied terrain and climatic conditions contribute to a diversity of ecosystems and species. The Georgian forests of the Caucasus Mountains contain more than 200 plant community associations, and 120 species of tree, 250 bushes, and 4,500 species of vascular plants. Among vascular plants, nine percent are endemic to Georgia and 14 percent are endemic to the Caucasus region. There are 572 vertebrate species (348 species of birds, 95 mammals, 52 reptiles, 13 amphibians, and 64 fishes).

Global Importance

Georgia's biodiversity is highly recognized at a global level Georgia, as part of the Caucasus region, is considered one of Global 200 vulnerable Ecoregions, one of the world's 25 biologically richest and most endangered terrestrial ecosystems, and one of the world's 221 Endemic Bird Areas. The Caucasus is also recognized as one of the world centers of agro-biodiversity.

Regional Importance

Due to the country's central location in the Caucasus region (a bio-geographical crossroads) the regional importance of biodiversity is also evident – Georgia's ecosystems contain species and habitats typical of Europe, Central Asia and the Middle East. For many species Georgia is on the western, eastern or northern edge of their range. Besides, the substantial parts of Caucasus endemic species ranges and populations are located in Georgia.

National importance

Biodiversity in Georgia has high national importance too, although often it is not recognized well. The majority of Georgians rely upon ecosystems resources and services: forestry and forest products, grazing, recreation, health, water, fishery, hunting, etc. Besides, economical development and poverty alleviation aspects are also linked with biodiversity and its uniqueness and richness.

APPENDIX D

New National laws and International Conventions since 1999

National Laws and Legal Acts

Unfortunately, the legal framework for biodiversity conservation in Georgia still is weak, and not much development has occurred during last four years in this direction: the legal acts on Protected Areas (1996), on the Protection of Wildlife (1996) and Forest Code (1999) still remain as statutory laws that lack implementing regulations. In addition, individual laws have poor linkage and contain contradictions. Besides, the capacity of implementing agencies to enforce laws is weak due to unclear enforcement mechanisms, lack of trained human resources and motivation, and lack of a material-technical base.

The only news in this topic is that the WWF Caucasus program office has developed the new law on Red Data Book that will list endangered species in Georgia from a legal standpoint. Two hearings have already taken place in the Parliament of Georgia, and it is expected that this law will come in to force soon after the third hearing. The advantages of this act are the following: it tries to fill the vacuum in endangered species legislation; it refers to International Union for Conservation of Nature (IUCN) for criteria on listing categories; it sets up the species listing mechanism; and it forbids the harvest or damage of listed species and their habitats. The adoption of this law will be a significant step towards improving endangered species legislation in Georgia. However, this law does not obligate the government to develop species action plans (or recovery plans) for listed species, does not contain de-listing criteria and process, and consequently does not obligate the state budget to spend money for endangered species recovery. This may be the next phase in development of endangered species legislation.

International Conventions and Agreements Ratified since 1999

Georgia ratified four international conventions and agreements since 1999:

The Convention on Conservation of Migratory Species of Wild Animals (CMS 1979) – entered into force for Georgia on February 11, 2000. The main objective of this convention is to take action by parties to avoid any migratory species becoming endangered, and to promote cooperation in and support reasearch relating to migratory species. Convention lists species in two appendixes: Appendix I – species needing immediate protection; Appendix II – species needing conservation and management.

Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA 1995) – entered into force for Georgia on March 2, 2001. This agreement derives from the Convention on Conservation of Migratory Species of Wild Animals (CMS 1979) that encourages international cooperative action to conserve migratory species. The fundamental principle of this agreement is: "Parties shall take coordinated measures to maintain migratory waterbird species in a favorable conservation status or to restore them to such a status. To this end, they shall apply

within the limits of their national jurisdiction the measures prescribed in Article III, together with the specific actions determined in the Action Plan provided for in Article IV, of this Agreement".

Agreement on the Conservation of Bats in Europe (London 1991) – entered into force for Georgia on December 21, 2001. This agreement also derives from the Convention on Conservation of Migratory Species of Wild Animals (CMS 1979) and sets the obligations and conservation measures for each party to conserve European bat species.

The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus 1998) – entered into force for Georgia on February 11, 2000. The objective of this convention is to obligate contracting parties "to guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters, in order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being".

The major problem to enforce international conventions and agreements remains the lack of capacity in relevant agencies.

APPENDIX E

List of Abbreviations

ADS Automated Directive System

AEWA Agreement on the Conservation of African-Eurasian Migratory Water birds

BSAP Biodiversity Strategy and Action Plan
CBO Community-Based Organization
CEO Caucasus Environmental Outlook
CEPF Critical Ecosystems Partnership Fund
CMS Convention on Migratory Species

CI Conservation International

DAI Development Alternatives Incorporated
EIA Environmental Impact Assessment
EPA Environmental Protection Agency

EU European Union

FAA Foreign Assistance Act FDP Forestry Development Project

GCCW Georgian Center for the Conservation of Wildlife

GEF Global Environmental Facility
GIS Geographic Information System
ICZM Integrated Coastal Zone Management

IUCN International Union for the Conservation of Nature KfW German Bank for Reconstruction and Development

MoE Ministry of Environment of Georgia

NACRES Noah's Ark Center for the Recovery of Endangered Species

NEAP National Environmental Action Program

NGO Non-Governmental Organization PAD Protected Areas Development

PA Protected Area

REC Regional Environmental Center

SDC Swiss Agency for Development and Cooperation

UNDP United Nations Development Program
UNEP United Nations Environment Program

USAID U.S. Agency for International Development

WB The World Bank

WWF World Wildlife Fund for Nature